

We claim:

1. A system for rupturing an encapsulated adhesive contained in sheet media, comprising:

a feeder for the sheet media; and

an activation device for releasing the encapsulated adhesive as the sheet media is moved past the device by the feeder.

2. The system as recited in claim 1, wherein the activation device is an activator blade past which the feeder moves the sheet media along a travel path, the activator blade being fixed in position relative to the path of the sheet media.

3. The system as recited in claim 2, further comprising a support surface adjacent the activator blade, the travel path passing between the activator blade and the support surface.

4. The system as recited in claim 2, wherein the support surface is a roller.

5. The system as recited in claim 2, further comprising:

a cutter for cutting the sheet media; and

a label applicator, the label applicator being downstream from the cutter.

6. The system as recited in claim 5, further comprising a pair of drive rollers between the activator blade and the cutter, the drive rollers being a part of the feeder.

7. The system as recited in claim 6, further comprising a roll supply for feeding a web of the sheet media, the roll supply being a part of the feeder.

8. The system as recited in claim 6, wherein the activator blade extends across at least half of a widthwise direction of the sheet media.

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9. The system as recited in claim 2, wherein the activator blade extends across at least half of a widthwise direction of the sheet media.

10. The system as recited in claim 2, wherein the activator blade extends across a majority of a width of the sheet media.

11. The system as recited in claim 2, wherein an edge of the activator blade is generally flat and linear and wherein the edge of the activator blade engages at least half of a width of the sheet media.

12. The system as recited in claim 2, wherein the blade is at a fixed angle relative to the travel path.

13. The system as recited in claim 12, wherein the fixed angle is an acute angle between the activator blade and an upstream position of the sheet media.

14. The system as recited in claim 1, further comprising:

a cutter for cutting the sheet media; and

a label applicator, the label applicator being downstream from the cutter.

15. The system as recited in claim 14, further comprising a printer for placing indicia on the sheet material, the activator blade being located between the printer and the cutter.

16. The system as recited in claim 1, further comprising a printer, the printer being located downstream of the activator blade and being adjacent to the travel path.

17. The system as recited in claim 1, further comprising a printer, the printer being located upstream of the activator blade and being adjacent to the travel path.

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18. The system as recited in claim 1, wherein the activation device is at least one crushing roller for rupturing and thereby releasing the encapsulated media.

19. The system as recited in claim 18, wherein the activation device further includes an activator blade past which the feeder moves the sheet media along a travel path, the activator blade being fixed in position relative to the path of the sheet media.

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20. The system as recited in claim 19, wherein the activator blade extends across at least half of a widthwise direction of the sheet media and wherein the activator blade is at a fixed angle relative to the travel path.

21. The system as recited in claim 19, wherein the feeder moves the sheet media along a travel path, the at least one crushing roller being located on one side of the travel path and the activator blade being located on an opposed side of the travel path.

22. The system as recited in claim 21, wherein at least one crushing roller includes a pair of crushing rollers on opposed sides of the travel path, a crushing nip being formed between the pair of crushing rollers.

23. The system as recited in claim 22, further comprising a printer, the printer being located downstream of the crushing nip.

24. The system as recited in claim 18, wherein the at least one crushing roller includes a pair of crushing rollers, the feeder moves the sheet media along a travel path and the pair of crushing rollers being located on opposed sides of the travel path, a crushing nip being formed between the pair of crushing rollers.

25. The system as recited in claim 18, further comprising a printer, the printer being located upstream of the at least one crushing roller.

26. The system as recited in claim 18, further comprising a printer, the printer being located downstream of the at least one crushing roller.

27. The system as recited in claim 18, further comprising:

a cutter for cutting the sheet media; and

a label applicator, the label applicator being downstream from the cutter.

28. The system as recited in claim 18, wherein the at least one crushing roller is a single roller which engages the sheet media as the sheet media is moved along the travel path.

29. The system as recited in claim 18, wherein the at least one crushing roller includes a plurality of roller positioned on a rotatable axel, the rollers being engageable with the sheet media when the axel is rotated.

30. The system as recited in claim 29, wherein the plurality of rollers are movable relative to the axel and wherein the rollers non-simultaneously contact the sheet media whereby different portions of the sheet media in a widthwise direction thereof are engaged by the rollers.

31. The system as recited in claim 30, wherein the plurality of rollers move to a rest position when rotation of the axel stops, gravity moving the rollers to the rest position upon stopping of the axel.

32. The system as recited in claim 31, wherein feeder moves the sheet media along a travel path and wherein the axel is stationary relative to the travel path when the rollers move to the rest position.

33. The system as recited in claim 29, wherein at least two sets of crushing rollers are provided, one of the sets being located downstream from the other set.

34. The system as recited in claim 33, wherein each of the at least two sets have a plurality of crushing rollers and an axel, the crushing rollers being rotatable about and movable relative to the axel for the set.

35. The system as recited in claim 29, further comprising a plurality of spacers, the spacers being located between the rollers.

36. The system as recited in claim 35, wherein at least some of the rollers have flared edges which overlie an adjacent spacer.

37. A method for rupturing an encapsulated adhesive contained in sheet media, comprising the steps of:

providing a sheet media;  
feeding the sheet media along a travel path;  
passing the sheet media against an activation device;

and

rupturing the encapsulated adhesive as the sheet media moves past the activation device.

38. The method as recited in claim 37, wherein the activation device includes an activator blade and wherein the method further comprises the step of spreading the adhesive after rupture thereof with the activator blade.

39. The method as recited in claim 38, wherein the activation device further comprises at least one crushing roller, the crushing roller being located upstream from the activator blade and wherein the method further comprises the step of sequentially engaging the sheet media with the at least one crushing roller and the activator blade.

40. The method as recited in claim 39, wherein the step of feeding the sheet media moves the sheet media at a first speed and the method further comprises the step of moving the at least one crushing roller at a second speed, the first speed being different from the second speed.

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41. The method as recited in claim 37, wherein the activation device includes at least one crushing roller, the method further comprises the step of rotating the at least one crushing roller about an axis.

42. The method as recited in claim 41, wherein the step of feeding the sheet media moves the sheet media at a first speed and the method further comprises the step of rotating the at least one crushing roller at a second speed, the first speed being different from the second speed.

43. The method as recited in claim 41, wherein the at least one crushing roller includes a plurality of rollers, the step of rotating includes eccentrically rotating the rollers about the axis.

44. The method as recited in claim 43, further comprising the step of moving the plurality of rollers by gravity to a rest position upon stopping of rotation about the axis, the rollers being out of contact with the sheet media when in the rest position.

45. The method as recited in claim 44, wherein the plurality of rollers are rotatable about an axel and wherein the method comprises the step of holding the axel stationary relative to the travel path during movement of the rollers to the rest position.

46. The method as recited in claim 40, further comprising the step of printing indicia on the sheet media.

47. The method as recited in claim 40, further comprising the step of using sheet media with indicia printed on at least one surface thereof.

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